

accordance with a user's input using the first UI. Thus, a user is allowed to set the transmission condition, thereby improving usability for a user.

[0015] The controller may control the display to display a second UI with a menu item for asking a user whether to transmit the first master setting information, if it is detected that the first display apparatus is connected to the output port and the transmission condition is set not to automatically transmit the first master setting information. Although the signal line is physically connected to the output port, a user is asked for approval to the transmission in accordance with the transmission condition, thereby considering a user's intention.

[0016] The controller may control the communicator to make a first communication request to the first display apparatus if it is detected that the first display apparatus is connected to the output port, designates the first display apparatus as the slave display apparatus if a first communication approval is received through the communicator, and transmit the first master setting information to the slave display apparatus. Thus, the process of setting the slave display apparatus after the physical connection is introduced.

[0017] The controller may designate the second display apparatus as the master display apparatus and controls the communicator to transmit a second communication approval to the master display apparatus, if it is detected that the second display apparatus is connected to the input port and a second communication request is received from the second display apparatus through the communicator. Thus, the process of setting the master display apparatus after the physical connection is introduced.

[0018] The first communication request and the second communication request may include a part of the first master setting information and a part of the second master setting information, respectively. Thus, the slave display apparatus can determine whether to approve of the transmission by analyzing a part of the setting information involved in the communication request.

[0019] The controller may compare the second master setting information and the stored setting information, and update the stored setting information with the second master setting information if it is determined that the second master setting information is different from the stored setting information. Thus, it is possible to skip the unnecessary update process.

[0020] The controller may compare the second master setting information and the stored setting information, and determine that the second master setting information and the stored setting information are different if a difference between the second master setting information and the stored setting information is greater than a first critical range. Thus, it is possible to skip the unnecessary update process since the stored setting information is updated by taking the difference into account.

[0021] The controller may compare the second master setting information and the stored setting information, and transmit first error information based on the stored setting information to the master display apparatus if the difference is greater than a second critical range. Thus, it is possible to correct an error that occurs in the master display apparatus.

[0022] The controller may update the stored setting information with the second error information if second error information is received from the slave display apparatus

through the communicator. Thus, it is possible to make a recovery based on the information received from the slave display apparatus if an error occurs.

[0023] According to an aspect of another exemplary embodiment, there is provided a method of controlling a display apparatus which is used for a video wall formed by a plurality of display apparatuses that are sequentially connected to one another, the display apparatus comprising an output port to which a first display apparatus of the plurality of display apparatuses is connectable and an input port to which a second display apparatus of the plurality of display apparatuses is connectable, the method comprising: storing setting information of the display apparatus to display an image of the video wall; processing an image signal received from the second display apparatus based on the stored setting information; displaying the image of the video wall based on the processed image signal; designating the first display apparatus as a slave display apparatus if it is detected that the first display apparatus is connected to the output port and transmitting first master setting information based on the stored setting information to the slave display apparatus; and designating the second display apparatus as a master display apparatus if it is detected that the second display apparatus is connected to the input port and updating the stored setting information with second master setting information received from the master display apparatus.

[0024] The setting information may include information about at least one of image quality, a delay in image processing and color calibration of a display panel. Thus, it is possible to synchronize various pieces of setting information for the plurality of display apparatuses that are sequentially connected together.

[0025] The setting information may include position information about a relative arranged position of the display apparatus in the video wall, and the displaying the image of the video wall may include processing the image signal to display a part of the image of the video wall image based on the position information. Thus, the display apparatus forms a part of the video wall image.

[0026] The transmitting the first master setting information may include: selectively transmitting the first master setting information based on the stored setting information to the first display apparatus if it is detected that the first display apparatus is connected to the output port. Although the signal line is physically connected to the output port, the master setting information is selectively transmitted in accordance with the setting information, thereby considering a user's intention.

[0027] The setting information may include information about a transmission condition, and the selectively transmitting the first master setting information may include: determining whether to transmit the first master setting information based on the information about the transmission condition. Thus, the transmission condition of whether to transmit the first master setting information or not is introduced.

[0028] The determining whether to transmit the first master setting information based on the information about the transmission condition may include: displaying a first user interface (UI) with menu items related to the transmission condition; and setting the transmission condition in accordance with a user's input using the first UI. Thus, a user is allowed to set the transmission condition, thereby improving usability for a user.